mimio®

MimioProjector User Guide

mimio.com

© 2013 Sanford, L.P. All rights reserved. Revised 1/17/2013.

No part of this document or the software may be reproduced or transmitted in any form or by any means or translated into another language without the prior written consent of Sanford, L.P.

Mimio, MimioClassroom, MimioTeach, MimioCapture, MimioVote, MimioView, MimioHub, MimioBoard, MimioPad, MimioProjector, and MimioStudio are registered marks in the United States and other countries. All other trademarks are the property of their respective holders.

Contents

About MimioProjector 7

What's Included 7

About MimioProjector 8

About the Control Panel 10

About the Remote Control 11

About the Connection Ports 13

Getting Started 15

Connecting the Projector 15

Connecting to a Computer 16

Connecting to a Video Source 17

Setting Up the Remote Control 18

Turning On the Power 19

Turning off the Power 20

Status Lights 21

Adjusting the Projected Image 22

Resizing the Projected Image 22

Focusing the Projected Image 22

Changing the Projector Settings 23

Navigating the Projector Menu 23

Adjusting the 3D Settings 26

3D 26

3D Invert 26

3D Format 26

1080p @24 26

Adjusting the Interactive Settings 27

Adjusting the Options 27

Logo 27

Logo Capture 28

Auto Source 28

Input 28

Auto Power Off 28

Lamp Setting 28

Lamp Hours Used (Normal) 28

Lamp Hours Used (ECO) 28

Lamp Life Reminder 28
Lamp Power Mode 29
Clear Lamp Hours 29
Dynamic Black 29
High Altitude 29
Filters Remind 29
Information 30
Adjusting the Picture 30
Color Mode 30
Wall Color 30
Brightness 30
Contrast 30
Sharpness 30
Saturation 31
Hue 31
Gamma 31
Color Temperature 31
Color Space 31
Adjusting the Screen 31
Aspect Ratio 31
Phase 32
Clock 32
Horizontal Position 32
Vertical Position 32
Digital Zoom 32
Vertical Keystone 32
Ceiling Mount 32
Adjusting the General Settings 33
Language 33
Menu Location 33
Closed Caption 33
VGA OUT (Standby) 33
Auto Screen (12V Out) 33
Test Pattern 34
Security 34
Setting the Password 34
Reset 34
Adjusting the Volume 35
Mute 35

Volume 35
Microphone Volume 35
Caring for MimioProjector 37
Replacing the Remote Control Battery 37
Replacing the Lamp 38
Cleaning the Dust Filters 39
Getting Help 41
General Troubleshooting 41
Projector stops responding to all controls 41
Lamp burns out or makes a popping sound 41
Image Troubleshooting 41
No image is displayed 41
A partial, scrolling, or incorrect image is displayed 41
The notebook computer display is not displaying an image 42
Image is unstable or flickering 42
Image has vertical flickering bar 42
Image is out of focus 42
Image is stretched when displaying 16:9 DVD image 42
Image is too small or too large 42
Image is displayed with slanted sides 43
Image is reversed 43
3D Troubleshooting 43
A blurry double image is displayed 43
Two images are displayed side-by-side 43
Image not displayed in 3D 43
Sound Troubleshooting 43
Remote Control Troubleshooting 43
Contacting Mimio 44
Compatibility Modes 45
VGA Analog 45
PC Signal 45
Extended Wide Timing 46
Component Signal 47
HDMI Digital 48
PC Signal 48
Extended Wide Timing 49
Video Signal 50

HDMI 1.4a Mandatory 3D Timing - Video Signal 50

Technical and Environmental Information 51

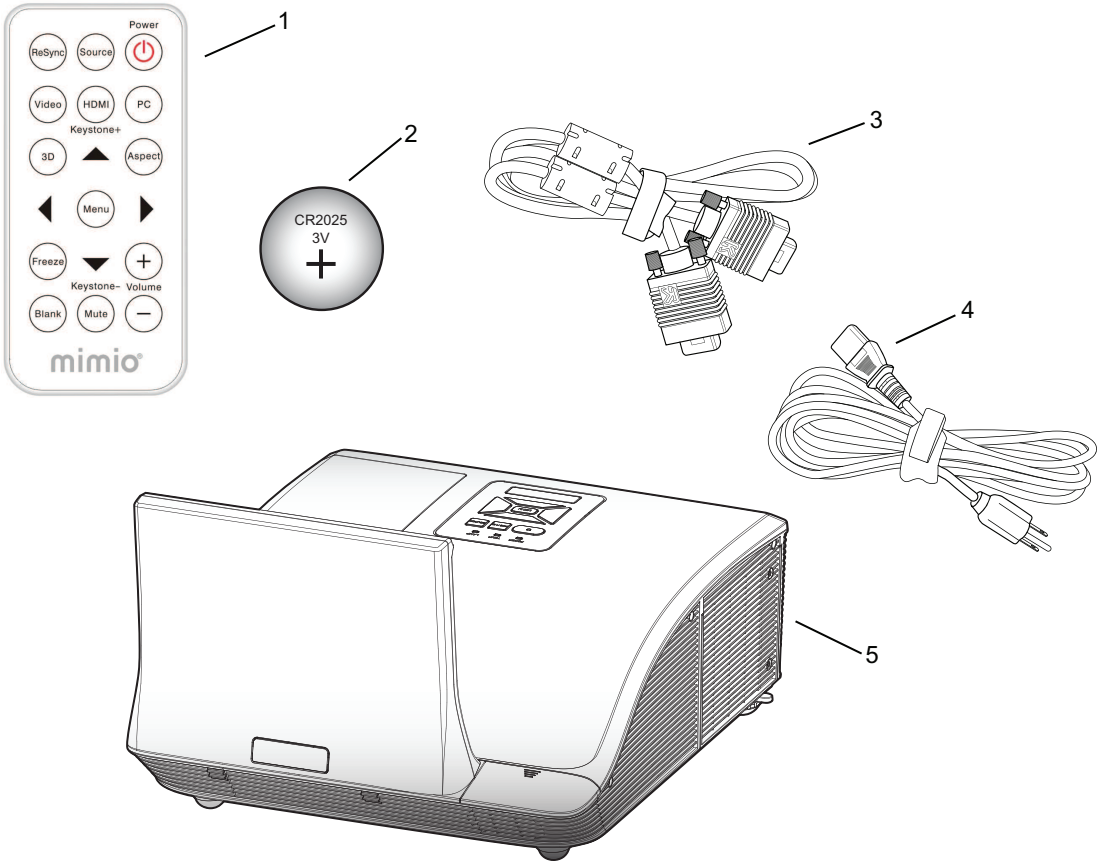
Usage Notice 51
Warnings 51
Precautions 51
Regulation & Safety Notices 52
FCC Notice 52
Notice 52
Caution 52
Operating Conditions 53
Notice: Canadian Users 53
Remarque à L'intention des Utilisateurs Canadiens 53
Declaration of Conformity for EU countries 53
Projector Mount Saftey Notices 53
Environmental Information 54
Documentation Feedback 55

Chapter 1

About MimioProjector

What's Included

The MimioProjector package contains the following items:

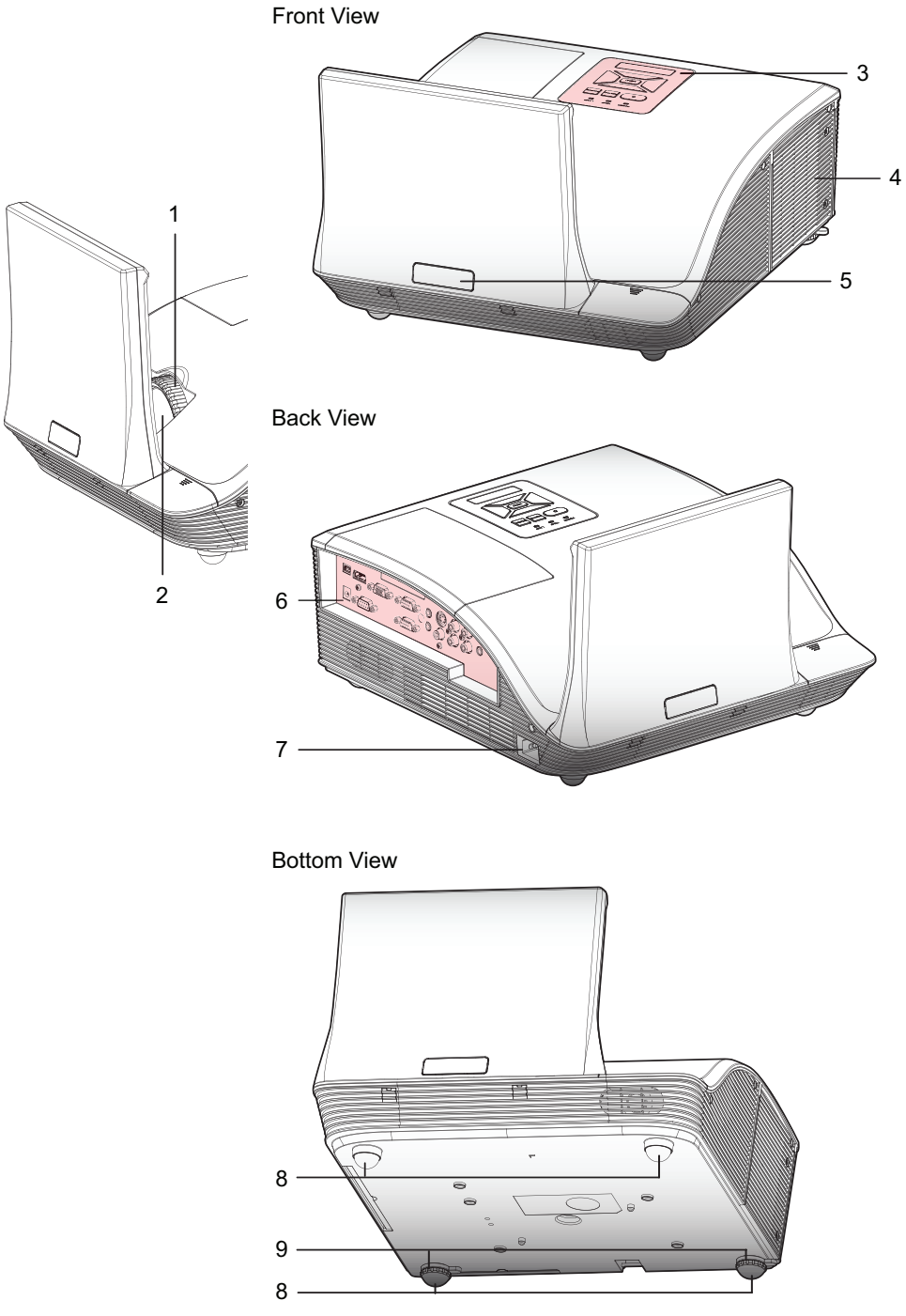


1	Remote control	4	Power cord
2	Remote control battery	5	Projector with lens cap
3	VGA cable		

If you are missing any of the items above, contact Customer Support.

About MimioProjector

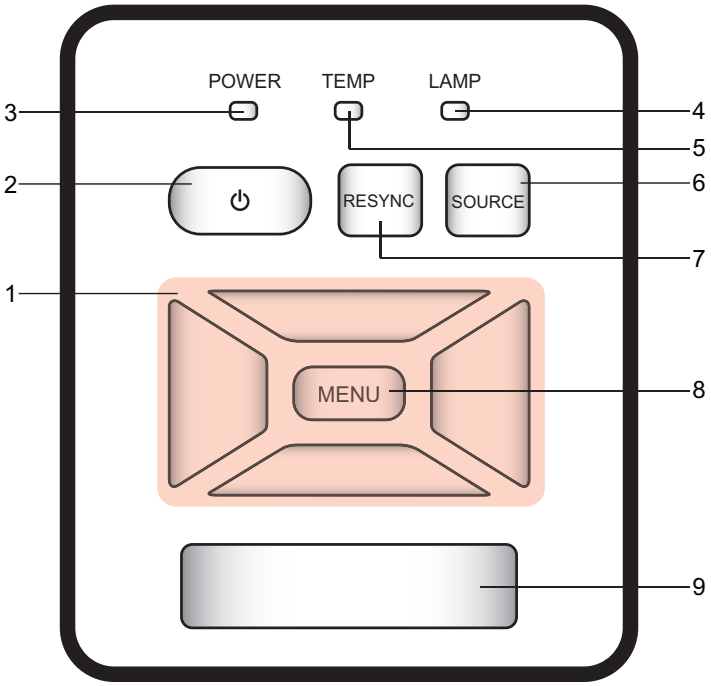
The following figure shows the major components of the MimioProjector.



1	Focus ring	6	Input/Output connection ports
2	Lens	7	Power connector
3	Control panel	8	Elevator feet
4	Lamp cover	9	Elevator feet spacers
5	IR Receiver		

About the Control Panel

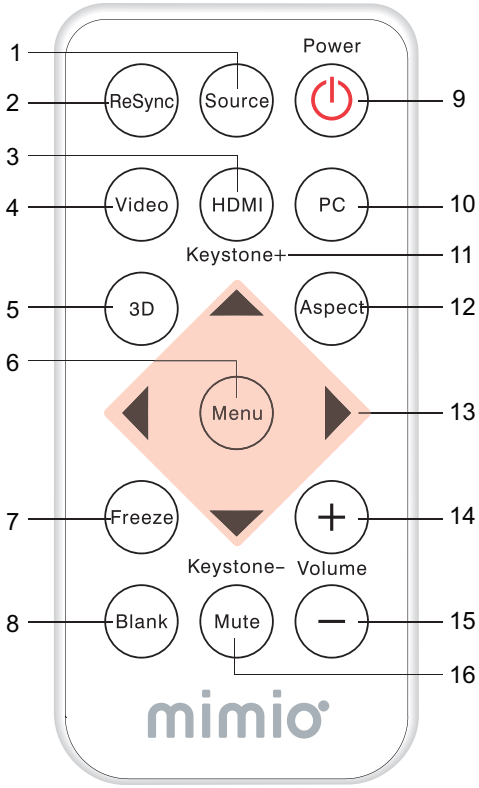
The following figure shows the components of the MimioProjector control panel.



1	Navigation keys	Navigate through menus and make selections.
2	Power button	Turn the projector on and off.
3	Power status light	Indicates the power status of the projector.
4	Lamp status light	Indicates the projector lamp status.
5	Temperature status light	Indicates the projector temperature status.
6	Source button	Select an input signal.
7	Resync button	Automatically synchronize the PC analog timing to the optimized condition.
8	Menu/Exit button	Open the menu screen or exit a menu.
9	IR receiver	

About the Remote Control

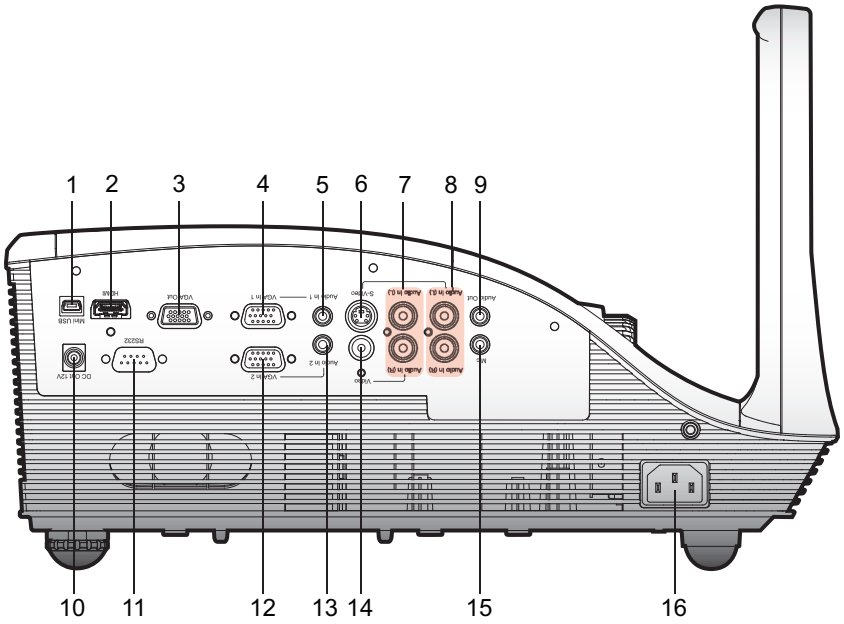
The following figure shows the components of the MimioProjector remote control.



1	Source	Select an input signal.
2	Resync	Automatically synchronize the PC analog timing to the optimized condition.
3	HDMI	Switch to HDMI input.
4	Video	Switch to Composite Video or S-Video input.
5	3D	Turn on and off the 3D menu.
6	Menu	Open the menu screen or exit a menu.
7	Freeze	Freeze or unfreeze the image on the screen.
8	Blank	Hide or show the screen image.
9	Power	Turn the projector on or off.
10	PC	Switch to VGA-A/VGA-B input.
11	Keystone ▽/△	Adjust image until the sides are vertical.
12	Aspect ratio	Select the desired aspect ratio.
13	Navigation keys	Navigate through menus and make selections.
14	Volume up	Increase the audio volume.
15	Volume down	Decrease the audio volume.
16	Mute	Mute the audio.

About the Connection Ports

The following figure shows the connection ports available on the MimioProjector .



1	Mini-USB	9	Audio output
2	HDMI	10	12V trigger relay (12V, 250mA)
3	VGA output	11	RS232
4	VGA in 1	12	VGA in 2
5	Audio in 1 (for VGA in 1)	13	Audio in 2 (for VGA in 2)
6	S-Video	14	Composite video input
7	Left/Right RCA audio input (for composite video input)	15	3.5 mm microphone input
8	Left/Right RCA audio input (for S-Video)	16	Power

This page intentionally left blank for double-sided printing.

Chapter 2

Getting Started

Review the following topics to install and start using your MimioProjector.

- Connecting the Projector
- Setting Up the Remote Control
- Turning On the Power

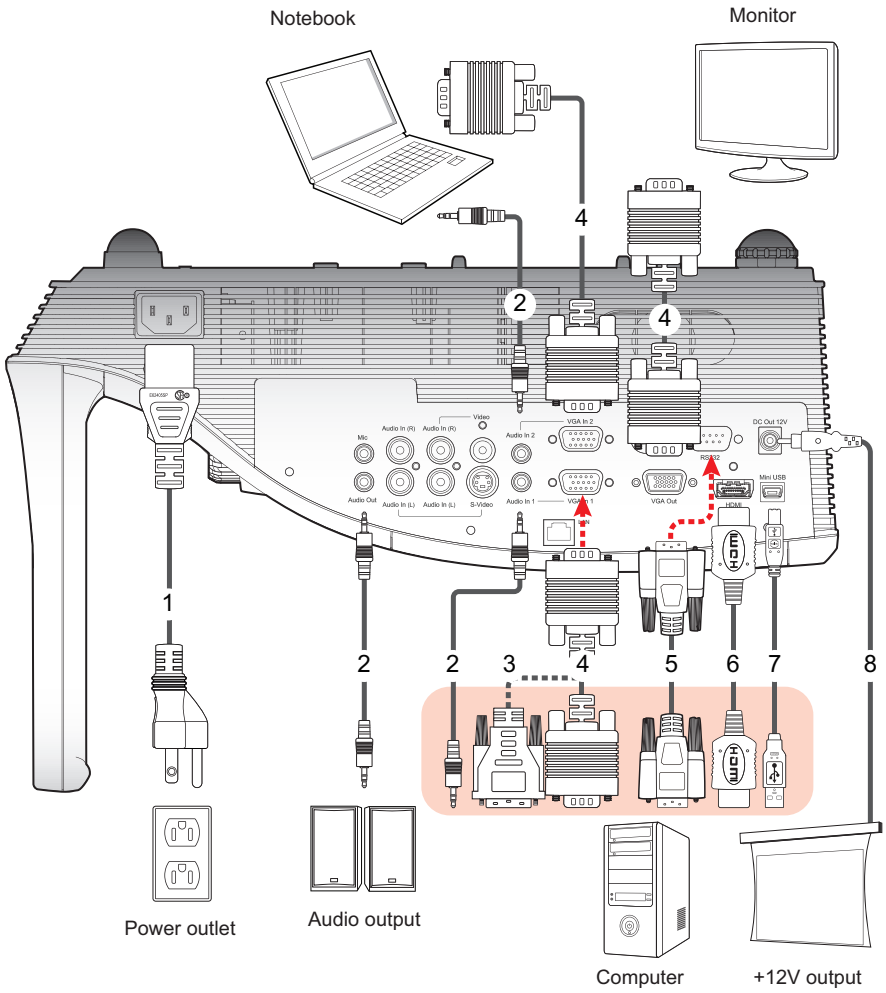
Connecting the Projector

You can connect MimioProjector to a computer or other video source..

- Connecting to a Computer
- Connecting to a Video Source

Connecting to a Computer

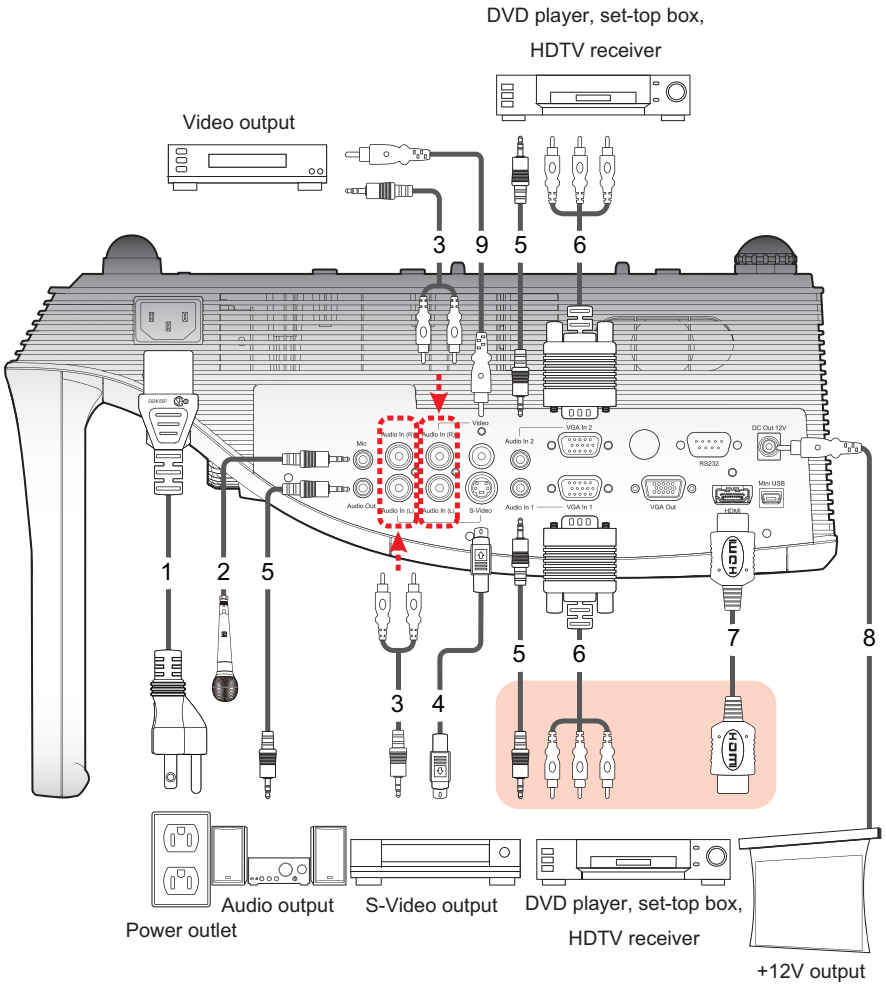
The following figure shows the connection methods available for connecting the MimioProjector to a computer.



1	Power cord (included)	5	RS232 cable
2	Audio cable	6	HDMI cable
3	VGA to DVI-A cable	7	USB cable
4	VGA cable (included)	8	12V DC jack

Connecting to a Video Source

The following figure shows the connection methods available for connecting the MimioProjector to a video source.



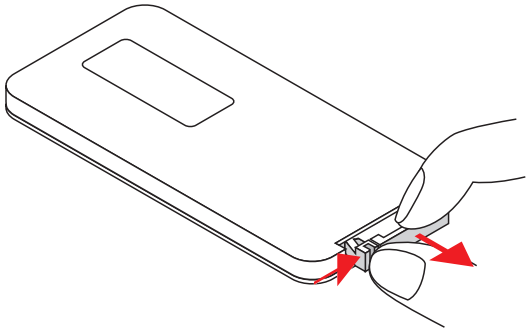
1	Power cord (included)	6	VGA to HDTV (RCA) cable
2	Microphone cable	7	HDMI cable
3	Audio cable jack/RCA	8	12V DC jack
4	S-Video cable	9	Composite video cable
5	Audio cable		

Setting Up the Remote Control

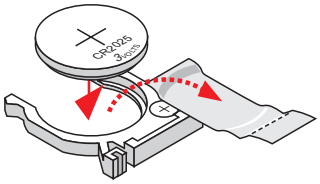
Before using the remote control for the first time, remove the transparent insulation tape.

To set up the remote control

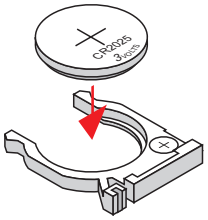
1. Press firmly and slide the battery holder out of the battery compartment.



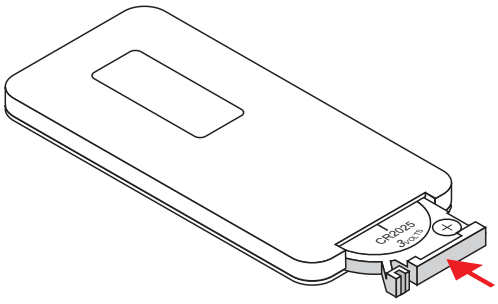
2. Remove the battery from the battery holder.
3. Remove the transparent insulation tape.



4. Replace the battery holder with the + polarity marking facing up as shown.



5. Slide the battery holder back into the battery compartment and press firmly.



Turning On the Power

The projector has an auto-off feature which automatically turns the projector off when no input signal is received by the projector for a set amount of time.

For information about setting the amount of time the projector will stay on before automatically turning off , see **Auto Power Off** on page 28.

To turn the projector on

1. Securely connect the power cord and signal cable.

   When connected, the Power status light turns red.

2. Press ⏻ on the control panel or on the remote control.

   The Power status light turns blue.

3. Turn on the source that you want to display on the screen (computer, notebook, video player, and so on).

   The projector detects the source automatically and displays the source image.

4. If multiple sources are connected to the projector, press **Source** on the control panel or on the remote control to switch between inputs.

Turning off the Power

To turn the projector off

1. Press ⏻ on the control panel or on the remote control.
   A confirmation message is displayed on the projector screen.
2. Press ⏻ again to turn the projector off.
   The Power status light turns red and blinks rapidly. The projector fans continue to run for approximately 10 seconds to ensure that the projector cools properly.
   When the system is finished cooling, the fans turn off and the Power status light turns solid red, indicating that the projector is in standby mode.
3. Unplug the power cord.

Status Lights

Message	Lamp status light Red	Temperature status light Red	Power status light Red	Power status light Blue
Power plug	Flash ON to OFF 100ms	Flash ON to OFF 100ms	Flash ON to OFF 100ms	--
Standby	--	--	ON	--
Power button ON	--	--	--	ON
Cooling state	--	--	0.5 second H (ON) 0.5 second L (OFF) flashing	--
Power button OFF Cooling completed; Standby mode	--	--	ON	--
Firmware download	ON	ON	ON	--
Thermal sensor error The following message is displayed: **1. Make sure air inlets and outlets are not blocked.** **2. Make sure the environment temperature is under 40 degrees C**	--	ON	--	ON
Fan lock error The following message is displayed: **The projector will switch off automatically**.	--	0.5 second H (ON) 0.5 second L (OFF) flashing	--	ON
Lamp error (lamp, lamp driver, color wheel)	ON	--	--	ON

Adjusting the Projected Image

You can adjust the size and focus of the projected image.

Resizing the Projected Image

The size of the projected image depends on the distance of the projector from the screen. The following table describes the general guidelines for projector distance from the screen.

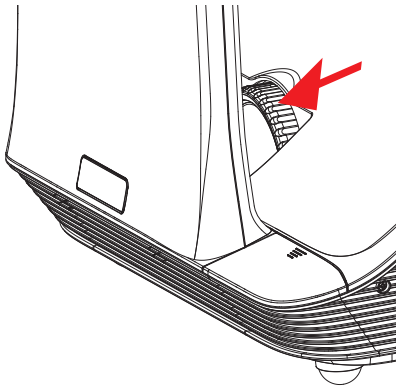
Screen Size (16:10)		Projection Distance (A)		Projection Distance (B)	
Diagonal (inch)	**mm**	**Inch**	**mm**	**Inch**	**mm**
70	1778	20.4	517	7.2	182
80	2032	23.5	596	10.3	262
87.2	2215	25.8	655	12.6	320
90	2286	26.7	677	13.5	343
100	2540	29.9	759	16.7	424

Projection Distance A(mm) =Screen size (mm) x 0.296. Tolerance is around 3.1%.

For example, Projection Distance (655 mm) = Screen Size (2215 mm) x 0.296.

Focusing the Projected Image

Use the focus ring to adjust the focus of the projected image. Turn the ring until the image is clear.



Chapter 3

Changing the Projector Settings

You can adjust the projector image and change the projector settings using the projector menus. The projector automatically detects the input source.

To change the projector settings

1. Press **Menu** on the control panel or on the remote control to display the projector main menu.
2. Use the navigation keys to select the desired menu item.
3. If the menu item has an arrow icon, , press ► to display the submenu for that setting, and then use the navigation keys to select the desired menu item.
4. Press ◄ or ► to adjust the selected setting.
5. Press **Menu** to return to the previous menu or to exit the menu screen.

Navigating the Projector Menu

The following table describes the structure of the projector menu and submenus.

Main Menu	Submenu	Settings
PICTURE	Color Mode	Brightest / PC / Movie / Game / User
	Wall Color	White / Light Yellow / Light Blue / Pink / Dark Green
	Brightness	0~100
	Contrast	0~100
	Sharpness	0~31
	Saturation	0~100
	Hue	0~100
	Gamma	0~3
	Color Temp.	Low / Mid / High
	Color Space	AUTO / RGB / YUV

Main Menu	Submenu		Settings
SCREEN	Aspect Ratio		AUTO / 4:3 / 16:9 / 16:10
	Phase		0~31
	Clock		-50~50
	H. Position		-10~10
	V. Position		-10~10
	Digital Zoom		1~10
	V Keystone		-20~20
	Ceiling Mount		Front / Front Ceiling / Rear / Rear Ceiling
SETTING	Language		English / Deutsch / Français / Italiano / Español / Português / Polski / Русский / Svenska / Norsk / 简体中文 / 日本語 / 한국어 / Türkçe / 繁體中文/Nederlands / عربي
	Menu Location		
	Closed Caption		Off / CC1 / CC2 / CC3 / CC4
	VGA Out (Standby)		Off / On
	Auto Screen(12V out)		Off / On
	Test Pattern		Off / On
	Security	Security	Off / On
		Change Password	000000
	Reset		No / Yes
AUDIO	Mute		Off / On
	Volume		0~32
	Microphone Volume		0~32

Main Menu	Submenu		Settings
OPTIONS	Logo		Default / User
	Logo Capture		
	Auto source		Off / On
	Input		HDMI / VGA-A / VGA-B / S-Video / COMPOSITE
	Auto Power Off		(min) 0~120
	Lamp Setting	Lamp Hours Used (Normal)	
		Lamp Hours Used (ECO)	
		Lamp Life Reminder	Off / On
		Lamp Power Mode	ECO / Normal / Extreme Dimming
		Clear Lamp Hours	No / Yes
	Dynamic Black		Off / On
	High Altitude		Off / On
	Dust Filter Reminder	Filters Remind (Hour)	
		Cleaning Up Reminder	No / Yes
	Information		Model Name / SNID / Source / Resolution / Software Version / Color Space / Aspect Ratio

Main Menu	Submenu		Settings
3D	3D		AUTO / Off / On
	3D Invert		Off / On
	3D Format		Frame Packing / Side-by-Side (Half) / Top and Bottom / Frame Sequential / Field Sequential
	1080p @ 24	96Hz / 144Hz	
INTERACTIVE	Interactive Settings		Off / IR Camera

Adjusting the 3D Settings

You can adjust the 3D settings for your projector.

3D

You can choose how the projector handles 3D images.

- **Auto** - select the 3D image automatically whenever an HDMI 1.4a 3D timing identification signal is detected
- **Off** - turn off 3D functionality
- **On** - turn on 3D functionality

3D Invert

If you see a discrete or overlapping image while using DLP 3D glasses, you may need to turn on this feature to get the best picture. This feature adjusts the left/right image sequence.

3D Format

When using 3D mode, select the 3D format that matches the format used by the input source.

- **Frame Packing** - supports HDMI 1.4a 3D input signals
- **Side-by-Side (Half)** - supports HDMI 1.4a 3D input signals
- **Top and Bottom** - supports HDMI 1.4a 3D input signals
- **Frame Sequential** - supports DLP Link 3D input signals from VGA / HDMI connector and HQFS 3D input signals from Composite/S-video connector
- **Field Sequential** - supports HQFS 3D input signals from Composite/S-video connector

1080p @24

Use this feature to select 96 or 144 Hz refresh rate as using 3D glasses in the 1080p @ 24 frame packing.

Adjusting the Interactive Settings

Use this setting to turn on and off the Interactive Pen function.

- **IR Camera** - the Interactive Pen function is on
- **Off** - the Interactive Pen function is off

Before turning on Interactive, unplug the mini-USB cable that connects your computer to the projector. After turning on Interactive, plug the mini-USB cable back in.

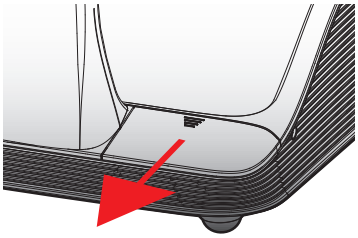
Notes

- This feature is only available when displaying images from HDMI/VGA input.
- This feature is not available when using 3D or Dynamic Black.

An external IR camera is required to use the Interactive feature. The IR camera must be connected to the projector before the projector is mounted.

To connect the IR camera

1. Remove the camera connector cover from the projector.



2. Plug the camera into the camera connector.

Adjusting the Options

From the Options menu, you can change many of the projector settings as well as view the projector information.

Logo

You can select the image to display on projector startup.

- **Default**- displays the default screen on projector startup
- **User** - displays an image of your choice on projector startup

  See **Logo Capture** on page 28 for information on selecting an image.

Logo Capture

You can capture an image to display on projector startup.

Press ► to capture the image currently displayed on the screen.

Notes

- Ensure that the displayed image does not exceed the native resolution of the projector (WXGA:1280x800).
- Logo Capture is not available when 3D is enabled.
- The aspect ratio should be set to Auto before using capturing an image.

Auto Source

Select how to handle searching for an input source when the projector loses signal from the current input source.

- **On** - the projector searches for signals from other input sources when the current input signal is lost
- **Off** - the projector searches only for a signal from the current input connection when the current input signal is lost

Input

Use this option to select the input types that the projector will search for.

1. From the **Options** menu, select **Input**, and then press ►.
2. Select the input that you do not want the projector to search for, and then press ► to clear the check box for the selected input type.

Auto Power Off

The projector has an auto-off feature which automatically turns the projector off when no input signal is received by the projector for a set amount of time.

You can set the amount of time the projector will stay on before automatically turning off .

Lamp Setting

Lamp Hours Used (Normal)

View the amount of time the projector has been used in normal lamp power mode.

Lamp Hours Used (ECO)

View the amount of time the projector has been used in ECO lamp power mode.

Lamp Life Reminder

You can choose whether or not the projector displays a warning message when the lamp is nearing end of life.

Lamp Power Mode

The following lamp power modes are available:

- **Normal** - the projector lamp is at full brightness
- **ECO** - the projector lamp is dimmed to reduce power consumption, extending the life of the lamp
- **Extreme Dimming** - the projector lamp is dimmed 30 percent to reduce power consumption, extending the life of the lamp

Clear Lamp Hours

Reset the lamp hours counter after replacing the projector lamp.

Dynamic Black

Use Dynamic Black to display the image with the optimum contrast by automatically providing signal compensation to suit the currently displayed image.

Notes

- This feature is only available when the color mode is set to Movie.
- This feature is not available when using 3D or Interactive.
- Lamp Power Mode cannot be used with this feature.

High Altitude

The fan power required varies depending on the altitude you are at. Set this option appropriately to ensure that the projector cools properly.

- **On** - the built-in fans automatically run at a variable speed according to the internal temperature of the projector
- **Off** - the built-in fans run at high speed

  Select this option when using the projector at altitudes above 5000 feet/1524 meters.

Filters Remind

You can set a time to be reminded to perform filter maintenance.

- **Filters Remind (Hour)** - Set the number of hours that pass before you are reminded to clean the dust filters. The dust filters should be cleaned after every 500 hours of use. Clean the filters more frequently if the projector is used in a dusty environment.
- **Cleaning Up Reminder** - Once you have cleaned or replaced the dust filters, reset the timer to be reminded then next time the filters require maintenance.

Information

Display the following projector information:

- Model name
- SNID
- Source
- Resolution
- Software version
- Color space
- Aspect ratio

Adjusting the Picture

Many settings are available for adjusting the picture displayed by the projector..

Color Mode

The following optimized color modes are available for viewing various types of images.

- **Brightest** - for brightness optimization
- **PC** - for viewing meeting presentations
- **Movie** - for viewing video content
- **Game** - for viewing game content
- **User** - for storing your manually configured settings

Wall Color

Select the wall color that the image is projected onto.The projector settings automatically adjust to show the correct image tone, compensating for color deviation due to wall color.

Brightness

Adjust the brightness of the image.

- Press ◄ to darken image.
- Press ► to lighten the image.

Contrast

The Contrast controls the difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

- Press ◄ to decrease the contrast.
- Press ► to increase the contrast.

Sharpness

Adjust the sharpness of the image.

This setting is only supported when Movie is selected as the color mode.

- Press ◄ to decrease the sharpness.
- Press ► to increase the sharpness.

Saturation

Adjust the color saturation of the image. The saturation ranges from black and white to fully saturated color.

This setting is only supported when Movie is selected as the color mode.

- Press ◄ to decrease the amount of saturation in the image.
- Press ► to increase the amount of saturation in the image.

Hue

Adjust the red and green color balance.

This setting is only supported when Movie is selected as the color mode.

- Press ◄ to increase the amount of green in the image.
- Press ► to increase the amount of red in the image.

Gamma

Adjusts the representation of dark scenery. The greater the gamma value, the bright dark scenery will appear.

- Press ◄ to decrease the gamma value.
- Press ► to increase the gamma value.

Color Temperature

At a higher color temperature, the image appears colder; at a lower color temperature, the image appears warmer.

Color Space

Select the appropriate color matrix type; Auto, RGB, or YUV.

Adjusting the Screen

You can adjust the screen and display settings for the projector.

Aspect Ratio

The following aspect ratios are available for scaling the projected image.

- **Auto** - keeps the image the original width-to-height ratio and maximizes the image to fit native horizontal or vertical pixels
- **4:3** - scales the image to fit the screen and displays using a 4:3 ratio
- **16:9**- scales the image to fit the width of the screen and adjusts the height to display the image using a 16:9 ratio
- **16:10** - scales the image to fit the width of the screen and adjusts the height to display the image using a 16:10 ratio

Phase

Change the signal timing of the display to match the timing of the graphics card for your computer. If the image appears unstable or flickers, use this setting to correct it.

- Press ◄ to decrease the signal timing.
- Press ► to increase the signal timing.

Clock

Change the display data frequency to match the frequency of the graphics card for your computer. Adjust this setting only if the image appears to flicker vertically.

- Press ◄ to decrease the data frequency.
- Press ► to increase the data frequency.

Horizontal Position

Adjust the horizontal position of the projected image.

The range for this setting depends on the input source.

- Press ◄ to move the image left.
- Press ► to move the image right.

Vertical Position

Adjust the vertical position of the projected image.

The range for this setting depends on the input source.

- Press ◄ to move the image down.
- Press ► to move the image up.

Digital Zoom

Use this setting to zoom the projected image.

- Press ◄ to reduce the size of the image.
- Press ► to magnify the image on the projection screen.

Vertical Keystone

Use this setting to adjust the vertical distortion of the image. If the image appears trapezoidal, adjust this setting to make the image appear rectangular.

- Press ◄ or ► to adjust the vertical distortion of the image.

Ceiling Mount

Select the location of the ceiling mounted projector.

- **Front** - the image is projected straight onto the screen.
- **Front Ceiling** - the image turns upside down (default).
- **Rear** - the image appears reversed.
- **Rear Ceiling** - the image appears reversed and upside down.

Adjusting the General Settings

You can adjust many of the general settings for your projector.

Language

Select the language to use when displaying the projector menus.

Menu Location

Select the location for the projector menu to display.

Top left

Top right

Center

Bottom left

Bottom right

Closed Caption

The following closed caption options are available:

- Off
- CC1
- CC2
- CC3
- CC4.

VGA OUT (Standby)

You can enable VGA OUT connection to display the projector image on an additional display.

- Select **On** to enable VGA OUT connection.

Auto Screen (12V Out)

If you are using the projector with a powered screen, you can choose to automatically lower and raise the screen when the projector is powered on and off.

- **On** - the screen lowers automatically when you turn the projector power on and raises automatically when you turn the projector power off
- **Off** - the screen does not lower and raise automatically when you turn the projector power on and off

Test Pattern

You can display a test pattern to test the image settings.

- **On** - show the test pattern
- **Off** - hide the test pattern

Security

You can choose to require a password to be entered each time the projector is turned on. The following security settings are available:

- **On** - the user must enter a password in order to power on the projector
- **Off** - the user is not required to enter a password in order to power on the projector

Setting the Password

If the password is entered incorrectly 3 times, the projector automatically shuts down. If you forget your password, contact Mimio Customer Support for assistance.

To set the password for the first time

1. From the **Security** menu, select **Change Password**, and then press ►.
2. Use the navigation keys to enter `000000` as the current password, and then press ►.

   If the password is entered incorrectly 3 times, the projector automatically shuts down.
3. Use the navigation keys to enter a new password, and then select **ENTER** to confirm.

   The password must be six digits.
4. Use the navigation keys to enter the new password again, and then select **ENTER** to confirm.

To change the password

1. From the **Security** menu, select **Change Password**, and then press ►.
2. Use the navigation keys to enter the current password, and then press ►.

   If the password is entered incorrectly 3 times, the projector automatically shuts down.
3. Use the navigation keys to enter a new password, and then select **ENTER** to confirm.

   The password must be six digits.
4. Use the navigation keys to enter the new password again, and then select **ENTER** to confirm.

Reset

Resetting the projector resets all projector settings to the factory defaults.

- Select **Yes** to reset the projector.

Adjusting the Volume

You can adjust the projector volume settings.

Mute

You can choose to mute the projector audio.

You can also press **Mute** on the remote control to turn mute on and off.

Volume

Use this setting to increase or decrease the speaker volume.

- Press ◄ to decrease the volume.
- Press ► to increase the volume.

You can also use the volume buttons on the remote control to adjust the volume.

Microphone Volume

Use this setting to increase or decrease the microphone volume.

- Press ◄ to decrease the volume.
- Press ► to increase the volume.

This page intentionally left blank for double-sided printing.

Chapter 4

Caring for MimioProjector

Replacing the Remote Control Battery

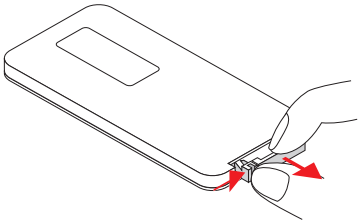
To ensure safe operation, please observe the following precautions :

- Use only CR2025 type battery.

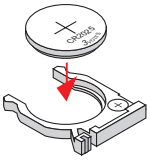
  Using the incorrect battery type may cause explosion.
- Avoid contact with water or liquid.
- Do not expose the remote control to moisture or heat.
- Do not drop the remote control.
- If the battery leaks while inserted in the remote control, carefully wipe the case clean and install new battery.
- Dispose of used battery according to battery instructions.

To replace the battery

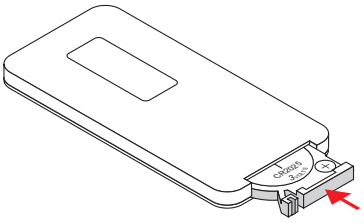
1. Press firmly and slide the battery holder out of the battery compartment.



2. Remove the old battery from the battery holder.
3. Insert a new battery into the battery holder with the + polarity marking facing up as shown.



4. Slide the battery holder back into the battery compartment and press firmly.



Replacing the Lamp

The projector automatically detects the lamp life. When the lamp is nearing the end of life, a warning is displayed on the screen.

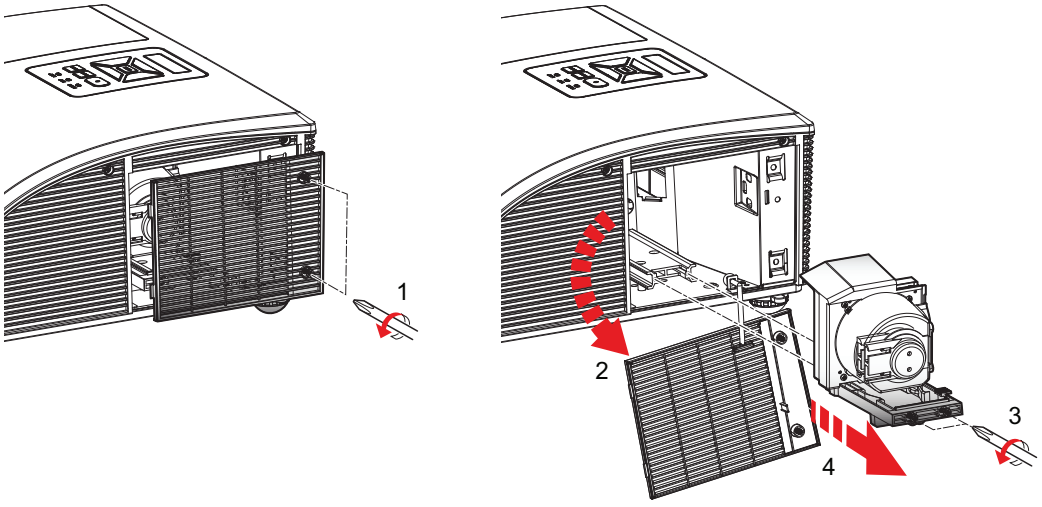
When the warning appears, contact Mimio Customer Support to order a replacement lamp as soon as possible. Make sure the projector is off and has cooled down for at least 60 minutes before changing the lamp.

Notes

- The screws on the lamp cover and the lamp cannot be removed.
- The projector cannot be turned on while the lamp cover is removed.
- Do not touch the glass area of the lamp. Oils from your skin can cause the lamp to shatter. Use a dry cloth to clean the lamp module if the lamp is accidentally touched.

To remove the lamp module

1. Press the power button to turn off the projector.
2. Allow the projector to cool down for at least 60 minutes.
3. Unplug the power cord.
4. Using a screwdriver, loosen the two screws on the lamp cover.
5. Lift and remove the lamp cover.
6. Using a screwdriver, loosen the two screws on the lamp module.
7. Pull the lamp handle up and slowly and carefully remove the lamp module.



To insert the new lamp module

1. Slowly and carefully insert the lamp module into the lamp compartment and push the lamp handle down.
2. Using a screwdriver, tighten the two screws on the lamp module.
3. Replace the lamp cover.
4. Using a screwdriver, tighten the two screws on the lamp cover.
5. Plug the power cord into a wall outlet.

6. Press the power button to turn on the projector.
7. Clear the lamp hours. See **Clear Lamp Hours** on page 29for information about clearing the lamp hours.

Cleaning the Dust Filters

The dust filters should be cleaned after every 500 hours of use. Clean the filters more frequently if the projector is used in a dusty environment.

When the dust filters need to be cleaned, a warning is displayed on the screen.

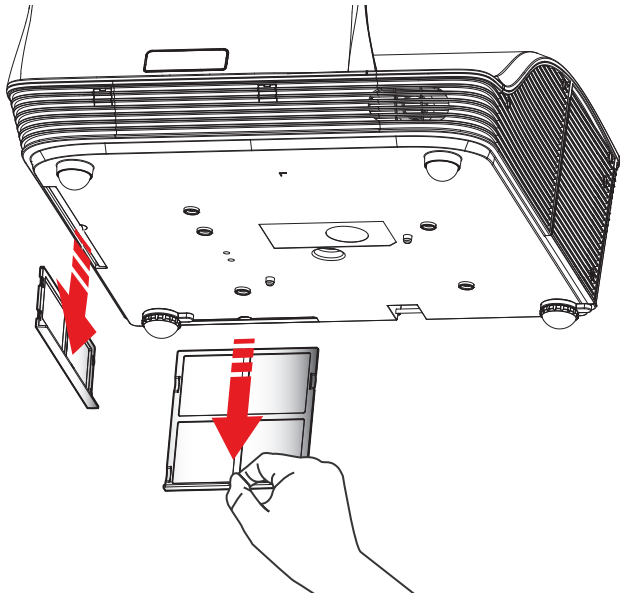
When the warning appears, clean the dust filters as soon as possible. Make sure the projector is off before cleaning the dust filters.

Notes

- The dust filters should be used in dusty environments.
- Properly maintaining the dust filters prevents overheating of the projector and related damage.

To clean the dust filters

1. Press the power button to turn off the projector.
2. Unplug the power cord.
3. Pull the latch and slowly and carefully remove the dust filters from the projector.



4. Use a vacuum to clean the dust filters.
5. Slide the dust filters back into the projector.
6. Plug the power cord into a wall outlet.
7. Press the power button to turn on the projector.
8. Reset the filter maintenance reminder.

   See **Filters Remind** on page 29 for information about resetting the filters reminder.

This page intentionally left blank for double-sided printing.

Getting Help

Review this chapter if you encounter a problem with your projector.

If you are unable to solve a problem, this chapter also describes how to contact Mimio Technical Support.

General Troubleshooting

Review this section if you encounter a general problem with your projector.

Projector stops responding to all controls

1. Press the power button to turn the projector off.
2. Unplug the power cord.
3. After 20 seconds, or longer, plug the power cord back in.
4. Press the power button to turn the projector on.

Lamp burns out or makes a popping sound

When the lamp reaches end of life, it burns out and may make a loud popping sound. The projector will not turn on again until the lamp module is replaced. For information about replacing the lamp, see **Replacing the Lamp** on page 38.

Image Troubleshooting

Review this section if you encounter a problem with the projector image.

No image is displayed

- Ensure all cables and power connections are correctly and securely connected as described in **Connecting the Projector** on page 15.
- Ensure the pins of connectors are straight and not broken.
- Ensure that the projection lamp is securely installed.
- Ensure that the Blank feature is turned off.

A partial, scrolling, or incorrect image is displayed

- Press **ReSync** on the remote control.

If you are using a computer as the input source, do the following:

1. Verify that the display resolution setting for your computer is set at 1080p or lower.

   Refer to the documentation for your computer for information about changing the display resolution for your computer.

   If you experience difficulty changing resolutions or your monitor freezes, restart all equipment including the projector.
2. If you are using a notebook computer, press the keyboard buttons needed to toggle the output setting.

Notebook Brand	Function Keys
Acer	[Fn]+[F5]
Asus	[Fn]+[F8]
Dell	[Fn]+[F8]
Gateway	[Fn]+[F4]
IBM/Lenovo	[Fn]+[F7]
HP/Compaq	[Fn]+[F4]
NEC	[Fn]+[F3]
Toshiba	[Fn]+[F5]
Mac Apple	System Preference -> Display -> Arrangement -> Mirror display

The notebook computer display is not displaying an image

Some notebook computers may deactivate the screens when a second display device is in use. Each has a different way to be reactivated. Refer to the documentation for your computer for detailed information.

Image is unstable or flickering

- Adjust the Phase setting on the projector. See **Phase** on page 32 for information about changing the Phase setting.
- Change the monitor color setting on your computer.

Image has vertical flickering bar

- Adjust the Clock setting on the projector. to make an adjustment. See **Clock** on page 32 for information about changing the Clock setting.
- Check and reconfigure the display mode of your graphic card to make it compatible with the projector.

Image is out of focus

- Adjust the focus ring on the projector lens.
- Make sure the projection screen is within the required distance.

Image is stretched when displaying 16:9 DVD image

- When you play anamorphic DVD or 16:9 DVD, the best image is displayed when the projector is set to use 16: 9 format.
- If displaying a 4:3 format DVD title, set the projector to use 4:3 format.

If the image is still stretched, verify that the format setting on your DVD player is set correctly.

Image is too small or too large

- Move the projector closer to or further from the screen.
- Adjust the aspect ratio setting on the projector. See **Aspect Ratio** on page 31for information about adjusting the aspect ratio.

Image is displayed with slanted sides

- If possible, reposition the projector so that the image is centered on the screen.
- Adjust the vertical keystone setting on the projector. See **Vertical Keystone** on page 32 for information about adjusting this setting.

Image is reversed

Verify that the ceiling mount setting on the projector is set correctly. See **Ceiling Mount** on page 32for information about adjusting this setting.

3D Troubleshooting

Review this section if you encounter a problem with 3D mode.

A blurry double image is displayed

Make sure the 3D feature is off. For information about turning off 3D, see **3D** on page 26.

Two images are displayed side-by-side

Set the 3D format to Side-by-Side (Half). For information about changing the 3D format, see **3D Format** on page 26.

Image not displayed in 3D

- Make sure your 3D glasses are powered on.
- Make sure the batteries in the 3D glasses have sufficient charge.
- Set the 3D format to Side-by-Side (Half).

  For information about changing the 3D format, see **3D Format** on page 26.

Sound Troubleshooting

Review this section if you encounter a problem with the projector sound.

- If you are playing sound from an external source, make sure you have the audio cable securely connected to the source device and the audio input on the projector.
- Make sure no external speakers are connected.
- Make sure the volume is not set to the minimum.
- Make sure the Mute feature is off.

Remote Control Troubleshooting

Review this section if you encounter a problem with the projector remote control.

- Make sure the operating angle of the remote control is within ±30° both horizontally and vertically of one of the IR receivers on the projector.
- Make sure there are no obstructions between the remote control and the projector.
- Move to within 7 m *(±0°)* of the projector.
- Make sure the battery is inserted correctly.
- Replace the battery.

Contacting Mimio

Mimio maintains an Internet Web site that offers support for MimioClassroom products. In addition, Mimio's Technical Support department is available by phone.

Web site: www.mimio.com

Phone: (877) 846-3721

Visit the Support section of our Web site at www.mimio.com to contact us by email.

Chapter 6

Compatibility Modes

VGA Analog

PC Signal

Modes	Resolution	V. Frequency [Hz]	H. Frequency [Hz]
VGA	640x480	60	31.5
	640x480	67	35.0
	640x480	72	37.9
	640x480	75	37.5
	640x480	85	43.3
	640x480	120	61.9
IBM	720x400	70	31.5
SVGA	800x600	56	35.1
	800x600	60	37.9
	800x600	72	48.1
	800x600	75	46.9
	800x600	85	53.7
	800x600	120	77.4
Apple, MAC II	832x624	75	49.1
XGA	1024x768	60	48.4
	1024x768	70	56.5
	1024x768	75	60.0
	1024x768	85	68.7
	1024x768	120	99.0

Modes	Resolution	V. Frequency [Hz]	H. Frequency [Hz]
Apple, MAC II	1152x870	75	68.7
SXGA	1280x1024	60	64.0
	1280x1024	72	77.0
	1280x1024	75	80.0
QuadVGA	1280x960	60	60.0
	1280x960	75	75.2
SXGA+	1400x1050	60	65.3
UXGA	1600x1200	60	75.0

Extended Wide Timing

Modes	Resolution	V. Frequency [Hz]	H. Frequency [Hz]
WXGA	1280x720	60	44.8
	1280x800	60	49.6
	1366x768	60	47.7
	1440x900	60	59.9
WSXGA+	1680x1050	60	65.3

Component Signal

Modes	Resolution	V. Frequency [Hz]	H. Frequency [Hz]
480i	720x480(1440x480)	59.94(29.97)	15.7
576i	720x576(1440x576)	50(25)	15.6
480p	720x480	59.94	31.5
576p	720x576	50	31.3
720p	1280x720	60	45.0
	1280x720	50	37.5
1080i	1920x1080	60(30)	33.8
	1920x1080	50(25)	28.1
1080p	1920x1080	23.98/24	27.0
	1920x1080	60	67.5
	1920x1080	50	56.3

HDMI Digital

PC Signal

Modes	Resolution	V. Frequency [Hz]	H. Frequency [Hz]
VGA	640x480	60	31.5
	640x480	67	35.0
	640x480	72	37.9
	640x480	75	37.5
	640x480	85	43.3
	640x480	120	61.9
IBM	720x400	70	31.5
SVGA	800x600	56	35.1
	800x600	60	37.9
	800x600	72	48.1
	800x600	75	46.9
	800x600	85	53.7
	800x600	120	77.4
Apple, MAC II	832x624	75	49.1
XGA	1024x768	60	48.4
	1024x768	70	56.5
	1024x768	75	60.0
	1024x768	85	68.7
	1024x768	120	99.0

Modes	Resolution	V. Frequency [Hz]	H. Frequency [Hz]
Apple, MAC II	1152x870	75	68.7
SXGA	1280x1024	60	64.0
	1280x1024	72	77.0
	1280x1024	75	80.0
QuadVGA	1280x960	60	60.0
	1280x960	75	75.2
SXGA+	1400x1050	60	65.3
UXGA	1600x1200	60	75.0

Extended Wide Timing

Modes	Resolution	V. Frequency [Hz]	H. Frequency [Hz]
WXGA	1280x720	60	44.8
	1280x800	60	49.6
	1366x768	60	47.7
	1440x900	60	59.9
WSXGA+	1680x1050	60	65.3

Video Signal

Modes	Resolution	V. Frequency [Hz]	H. Frequency [Hz]
480p	640x480	59.94/60	31.5
480i	720x480(1440x480)	59.94(29.97)	15.7
576i	720x576(1440x576)	50(25)	15.6
480p	720x480	59.94	31.5
576p	720x576	50	31.3
720p	1280x720	60	45.0
	1280x720	50	37.5
1080i	1920x1080	60(30)	33.8
	1920x1080	50(25)	28.1
1080p	1920x1080	23.98/24	27.0
	1920x1080	60	67.5
	1920x1080	50	56.3

HDMI 1.4a Mandatory 3D Timing - Video Signal

Modes	Resolution	V. Frequency [Hz]	H. Frequency [Hz]
Frame Packing	720p	50	31.5
	720p	59.94/60	15.7
	1080p	23.98/24	15.6
Side-by-Side(Half)	1080i	50	31.5
	1080i	59.94/60	31.3
Top and Bottom	720p	50	45.0
	720p	59.94/60	37.5
	1080p	23.98/24	33.8

Chapter 7

Technical and Environmental Information

This chapter contains technical information for the MimioProjector.

For product specifications and compliance information, visit the Documentation section of the Support area of our Web site at www.mimio.com.

Usage Notice

Follow all warnings, precautions, and maintenance as recommended in this user guide.

Warnings

- Do not look into the projector lens when the lamp is on. The bright light may hurt and damage your eyes.
- To avoid the risk of fire or electric shock, do not expose the projector to rain or moisture.
- Do not open or disassemble the projector as this may cause electric shock.
- When replacing the lamp, allow the unit to cool down first. Follow the instructions as described under **Replacing the Lamp** on page 38.
- The projector automatically detects the life of the lamp. Be sure to replace the lamp when the projector displays the lamp warning message.
- After replacing the projector lamp, reset the lamp hours setting. See **Clear Lamp Hours** on page 29 for information about resetting the lamp hours.
- When turning the projector power off, ensure that the cooling cycle completes before disconnecting the power. Allow 10 seconds for the projector to cool down.
- Do not block the light path between the light source and the lens with any object. Doing so could cause the object to catch on fire.
- Do not look into or point the laser pointer on your remote control into any person's eyes. Laser pointers can cause permanent damage to eyesight.

Precautions

- Turn off and unplug the power plug from the AC outlet before cleaning the product.
- Use a soft dry cloth with mild detergent to clean the display housing.
- Disconnect the power plug from the AC outlet if the product is not being used for a long period of time.

Do not do the following

- Clean the lens.
- Block the ventilation slots and openings on the unit.
- Use abrasive cleaners, waxes, or solvents to clean the unit.
- Use under the following conditions:
  - In extremely hot, cold, or humid environments.
    - Ensure that the ambient room temperature is between 5°C - 40°C.
    - Ensure relative humidity is a maximum of 80%, non-condensing.
  - In areas susceptible to excessive dust and dirt.
  - Near any appliance generating a strong magnetic field.
  - In direct sunlight.

Regulation & Safety Notices

This section lists the general notices of your projector.

FCC Notice

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Notice

Shielded cables All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

Caution

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this projector.

Operating Conditions

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference and
2. This device must accept any interference received, including interference that may cause undesired operation.

Notice: Canadian Users

This Class B digital apparatus complies with Canadian ICES-003.

Remarque à L'intention des Utilisateurs Canadiens

Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

Declaration of Conformity for EU countries

- EMC Directive 2004/108/EC (including amendments)
- Low Voltage Directive 2006/95/EC
- R & TTE Directive 1999/5/EC (if product has RF function)

Projector Mount Saftey Notices

Read these warnings carefully and use the product as intended.

- The manufacturer shall not be legally responsible for any equipment damage or personal injury caused by incorrect installation or operation.
- The wall mount is designed for easy installation and removal. The manufacturer shall not be liable for damage to equipment or personal injuries arising from human factors or acts of God, such as earthquake or typhoon.
- The wall mount must be installed by professional personnel only.
- To avoid any hazard caused by falling objects, a minimum of two persons are needed to install or remove the wall mount.
- Maintain ample space around the projector to ensure good ventilation.
- To ensure safety and avoid any accident, investigate the structure of the wall and select an appropriate and durable location for the product before installing.
- The wall must have load-carrying capability to sustain more than four times the total weight of the projector and the wall mount. Also make sure the wall has enough strength to withstand earthquakes and other shocks.
- Check the areas around the installation location carefully.
  - Do not install the product in an area subject to high temperature, humidity, or contact with water.
  - Do not install the product near air conditioner vents.
  - Do not install the product in a location subject to dust or fumes.
  - Do not install the product on slanted surfaces; install only on vertical walls.
  - Do not install the product in an area subject to vibrations or shocks.

- Do not install the product in an area subject to direct exposure to bright light; doing so may cause eye fatigue when viewing the display panel.

- Do not modify any accessory or use broken parts. Contact Mimio Customer Support with any questions.
- Tighten all screws, but do not apply excessive torque to any screw. Excessive torque may break or damage the screw or screw threads.
- The wall mount is rated for a maximum load of 15 Kg (33 Ibs.).
- Do not hang or place any objects on the wall mount other than the projector.
- Drill holes and screws remain in the wall once the projector and wall mount are removed. Stains may occur after extended use.

Environmental Information

The equipment that you bought has required the extraction and use of natural resources for its production. It may contain hazardous substances for the health and the environment.

In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems.

Those systems will reuse or recycle most of the materials of your end life equipment in a sound way.

The crossed-bin symbol marked on your device invites you to use those systems.

If you need more information on the collection, reuse and recycling systems, please contact your local or regional waste administration.

You can also contact Mimio for more information on the environmental performances of our products.

Documentation Feedback

We are constantly working to produce the highest quality documentation for our products. We welcome your feedback. Send us your comments or suggestions about our online Help, printed, or PDF manuals.

Please include the following information with your feedback:

- Product name and version number
- Type of document: printed manual, PDF, or online Help
- Topic title (for online Help) or page number (for printed or PDF manuals)
- Brief description of content (for example, step-by-step instructions that are inaccurate, information that requires clarification, areas where more detail is needed, and so on)
- Suggestions for how to correct or improve the documentation

We also welcome your suggestions for additional topics you would like to see covered in the documentation.

Send email feedback to:

documentation@dymo.com

Please keep in mind that this email address is only for documentation feedback. If you have a technical question, please contact Customer Service.

This page intentionally left blank for double-sided printing.